

Credit Card Default Prediction

Wireframe Documentation

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Homepage

- The homepage of the webapp, consists of two sections:
 - o Sidebar containing Input Parameters pertaining to Demographical inputs such as: Credit Limit (Limit balance), Gender, Education level, Marital Status and Age.
 - o The user can type and set the Credit limit and the age.
 - o User can select from the provided options when selecting Gender, Education and Marital Status.
 - o Repayment status can be selected from a drop-down menu, while user has the freedom to input the bill amount.
- The input parameter sidebar can be removed from the screen using the cross button situated on the top right of the sidebar, if the user wishes to do so.
- The app harbours a custom colour theme of Light green and white, which many users may find soothing to their eyes.
- Additionally, Streamlit also gives the user the option to switch to dark-mode or light-mode.

The screenshot displays the 'Credit Card Default Prediction' web application. On the left is a green sidebar titled 'Input Parameters' with a close button (X) at the top right. The sidebar contains the following sections:

- Demographics**
 - Credit Limit**: A numeric input field with a value of 0 and increment/decrement buttons.
 - Gender**: Radio buttons for Male (selected) and Female.
 - Education**: Radio buttons for Graduate school (selected), University, High school, and Others.
 - Marital Status**: Radio buttons for Married (selected), Single, and Others.
 - Age**: A numeric input field with a value of 18 and increment/decrement buttons.

The main content area is white and titled 'Credit Card Default Prediction'. It features a 'Deploy' button in the top right corner. Below the title, there are two columns of input fields:

- Repayment status**: A column with six dropdown menus, each labeled with a month (September, August, July, June, May, April) followed by 'PAY'. All dropdowns are currently set to 'Pay duly'.
- Bill Amount (\$)**: A column with six numeric input fields, each labeled with a month (September, August, July, June, May, April) followed by 'BILL_AMT'. All input fields have a value of 0 and increment/decrement buttons.

Prediction

This page mainly consists of two sections:

- Amount of Previous payments (where the user can type the previous payment amounts)
- In Prediction Result section, the user can 3 types of results i.e
 - o The likelihood of credit card default
 - o Credit Utilization Ration (CUR)
 - o The Probability of default
 - o Info button below clarifying why the probability of default shows 35% in the beginning.

Amount of previous payments (\$)

September PAY_AMT

0

+

June PAY_AMT

0

+

August PAY_AMT

0

+

May PAY_AMT

0

+

July PAY_AMT

0

+

April PAY_AMT

0

+

Prediction Result

Low likelihood of default.

Credit Utilization Ratio: 0.00%

Probability of Default: 11.30%



Link to the web application:

<https://credit-card-default-prediction-lh653hvk6akelqbfzzf5g.streamlit.app/>